Cane toads in Western Australia

GOVERNMENT OF WESTERN AUSTRALIA

Department of **Biodiversity, Conservation and Attractions**

PARKS AND **WILDLIFE** SERVICE

Where are they?

Cane toads crossed the Western Australia/Northern Territory border in 2009. Since then, they have been steadily making their way west at an average rate of 50 kilometres a year. In 2021, cane toads reached Bandilngan (Windjana Gorge) and Dimalurru (Tunnel Creek) for the first time.

If you are traveling from an area that already has toads, to an area that is toad-free please make sure to check you load for a toad. Cane toads like to hide in cars, caravans, trailers and boats.

Help protect native species, **don't take a toad up the road**.

2022
2021
2015
2013
Kununurra
Derby
Broome
Halls Creek
Fitzroy River
Fitzroy Crossing
Exmouth
Western Australia
PERTH
0
200
400
600
800
1000
kilometres

Above A cane toad will secrete poison when it is threatened. *Photo – DBCA*

What's the problem with cane toads?

Cane toads are introduced pests. They secrete a deadly toxin from their glands which makes them lethal to anything that tries to eat them.

Cane toads have no native predators in Australia. Eating a cane toad may cause death in some animals in as little as 15 minutes.

Above A keel back snake swallowing a cane toad. *Photo – DBCA*

Cane toads pose a big risk to populations of endangered northern quolls, goannas, king brown snakes, freshwater crocodiles, blue tongue lizards, and other predator species.

Above Toad mustering is a good way to remove toads from the environment. *Photo – DBCA*

What can we do about cane toads?

DBCA are continuously working with researchers to find new ways to manage toads and mitigate their impact on the wildlife of Western Australia. Unfortunately, there is no known way to get rid of all the cane toads in Australia and there are no methods currently to stop cane toads from spreading. On a large landscape scale, they are very difficult to control for a range of factors including the topography, seasonal variations, remoteness, their breeding capacity and their ability to cope with a range of environmental factors and rapidly evolve to survive Australian conditions.

Ways that you can help:

- Learn how to identify a cane toad and teach others
- Use correct methods of euthanasia
- Join a local group in your area that conducts toad musters
- Check your load for a toad before you travel. Toads like to hide in trailers, boats and caravans.
- Report toad sightings ahead of the frontline.

Above Goannas can learn not to eat toads. *Photo – Macquarie University*

Teaching animals to avoid cane toads

Conditioned Taste Aversion or CTA is a method by which animals can learn to avoid certain foods if they have a bad experience. The Department of Biodiversity, Conservation and Attractions (DBCA) has developed a cane toad sausage from toad meat that smells and tastes like cane toad, with an added nausea inducing chemical so that when it's eaten, the animal will feel unpleasant nausea. This has shown to be effective in teaching northern quolls to avoid eating cane toads. We hope this will help save some of the Kimberley's endangered northern quoll populations from extinction.

Below Cane toad sausages. 5000 toads makes 2000 sausages. *Photo – DBCA*

Above Goanna and cane toad researcher, Georgia Ward-Fear.
Photo – Macquarie University

DBCA is also working with Macquarie University to conduct research into training goannas to avoid eating cane toads. This is done with teacher toads, baby cane toads which don't yet have enough toxin to be lethal. These teacher toads are released in areas of high goanna abundance at the cane toad frontline and when eaten by goannas, they make the animal feel sick, and the animal avoids eating a cane toad again in the future.

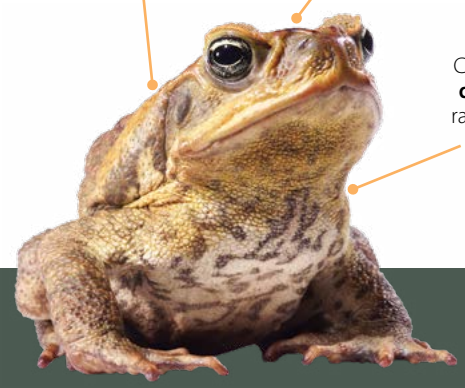
DBCA and Maquarie University is trialling CTA on freshwater crocodile populations. In the dry season, rivers in the Kimberley dry out and contract to small pools. Food and hunting areas become limited as all animals come in to stay near the remaining water holes. Freshwater crocodiles find themselves sharing a pool with many other crocodiles, and a big slow cane toad might look like a good easy meal. Eating an adult cane toad could be lethal to a freshwater crocodile, so we are trying to teach them that cane toads are not a good meal using cane toad leg meat baits laced with a nausea inducing chemical. Even still, not every crocodile will be a fast learner, and inevitably we will see some crocodiles die from cane toad toxicity. If you see a dead crocodile, please leave it, and notify a ranger.

Is it a cane toad?

As many native frogs can easily be mistaken for cane toads, it's important to know how to tell the difference.

The **big glands** on the cane toad's shoulder release a poisonous milky substance when the toad feels threatened.

Cane toads have a very distinctive bony **'m'-shaped** ridge over their nose.



Cane toad skin is **dry and warty**, rather than moist and slippery.

To check:

- ☐ Is the skin dry and warty?
- ☐ Are there glands on the toad's shoulders?
- ☐ Is there an 'm'-shaped ridge on its nose?

Any toads found outside their known range (see map on page 3) must be reported to Parks and Wildlife Service (see over the page). Do not kill these animals, a Parks and Wildlife officer will contact you with further directions.

Native frogs commonly mistaken for cane toads

North west frogs

Native frogs are important. Please don't kill them.
If you are unsure, leave it.

Limnodynastes convexiusculus - **marbled frog**

Cyclorana australis - **giant frog**

Litoria meiriana - **rock hole frog**

FrogID

For more information on native frogs, you can download the Frog ID app. Here you can listen to and record live frog calls and the app will ID the species for you.

Above A bag of toads being removed from the environment.
Below The right way to pick up a cane toad. *Photos – DBCA*

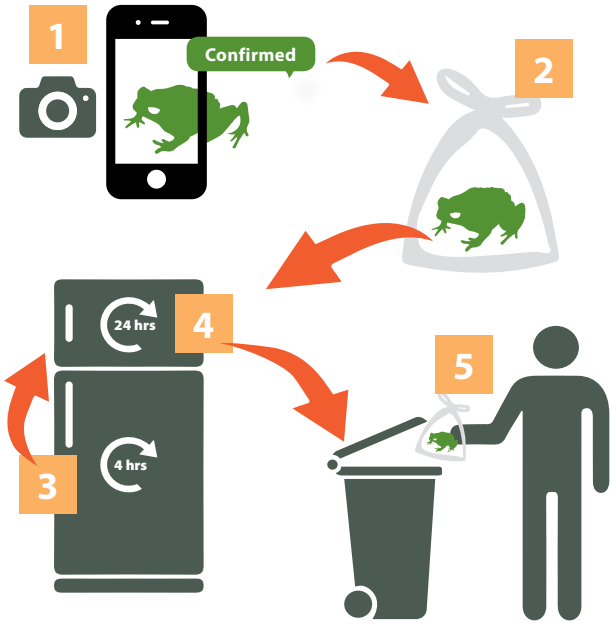
Collecting cane toads

There are live cane toad collection boxes at some DBCA campgrounds. If you are camping, you may see cane toads at night around your campground. Don't worry, they are not there to hurt you, and unless you eat one, or hurt it, you are in no danger. Check the instructions on the live toad collection box for safe ways to collect them, or talk to a ranger if you want to contribute to collecting toad meat for our cane toad CTA program.

Euthanasing cane toads – cooling and freezing

Cooling and freezing is the widely-used and preferred method for members of the public to kill cane toads. The following five steps are recommended:

1. Check the ID (see previous page for ID checklist) to ensure it is a cane toad, take a picture and text or email it to Parks and Wildlife Service to confirm the ID (see details below).
2. Place cane toads in a container, such as a plastic bag or container with a secure lid.
3. Put the container in a refrigerator for a minimum of four hours (this will anaesthetise the toads).
4. Put the container in a freezer until the toads are frozen solid (at least 24 hours).
5. Dispose of the container in your big green bin on bin day.



If you think you have found a cane toad, **take a clear photo** and **text it to 0400 693 807** or email **canetoads@dbca.wa.gov.au**

Reporting cane toads

If you see a cane toad ahead of the front line, please contain the animal, take a picture and report the animal to **0400 693 807**.
You can also report sightings online at toad scan **feralscan.org.au/toadscan/**

Do not kill the animal until it has been confirmed as a cane toad. Many native frogs look similar to cane toads. Your reports help us track the front line and target our CTA work where it is needed.

Don't take a toad down the road

Cane toads are excellent hitch hikers and have been known to travel by plane, truck, bus, boat and caravan to get to new places. They often travel along roads and hang out in campgrounds, we ask you to take great care when packing up to ensure you don't take a toad down the road! Report hitch hikers to **0400 693 807** with a clear photo and location.

DBCA Cane Toad Program
canetoad@dbca.wa.gov.au
0400 693 807

More information:
dbca.wa.gov.au/parks-and-wildlife-service/threat-management

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PARKS AND WILDLIFE SERVICE

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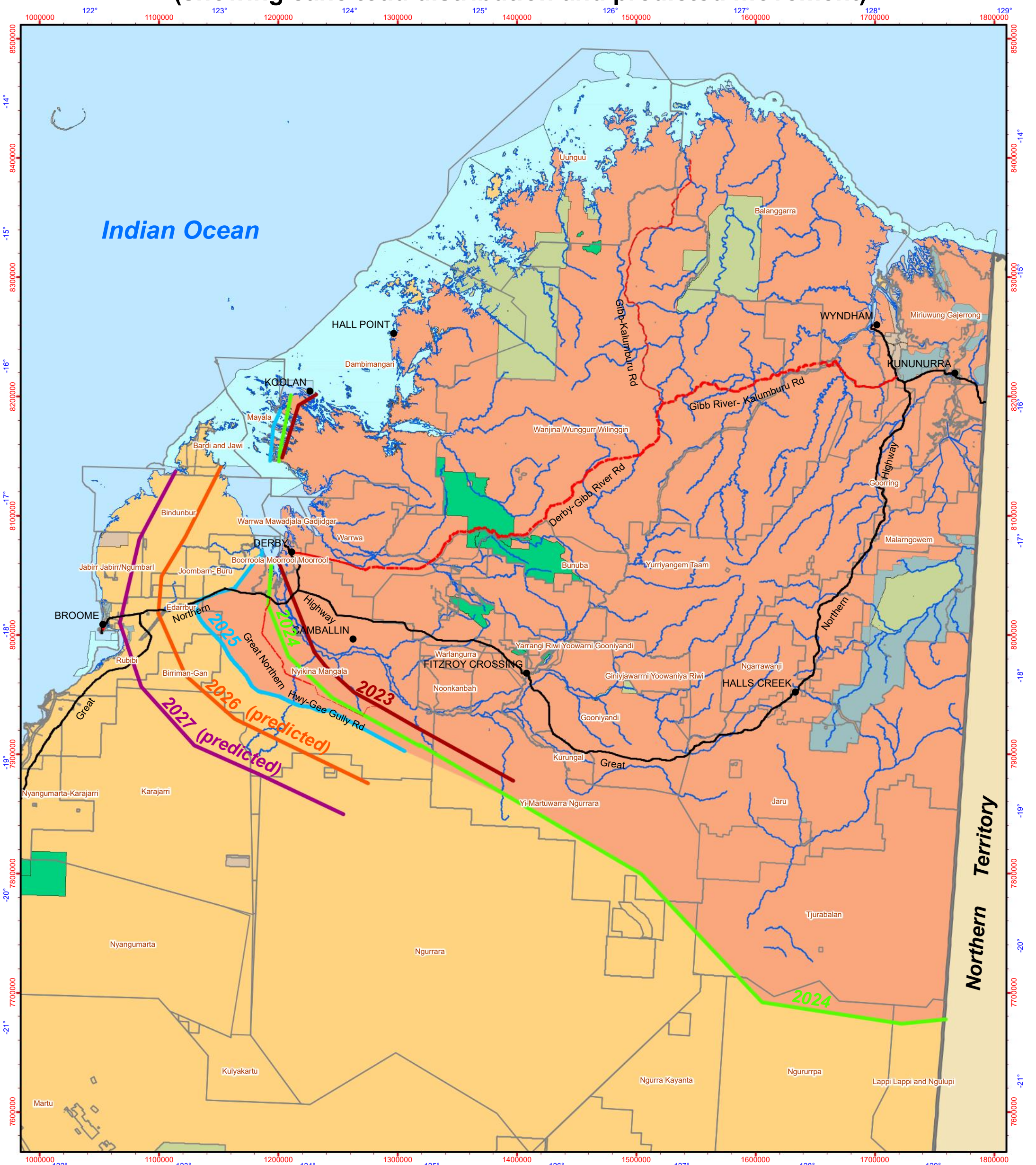
Cane toad frontline 2023 - 2025
(showing cane toad distribution and predicted movement)



Graticule shown at 1 degree intervals
Grid shown at 100000 metre intervals

Legend

- Traditional owner groups
- Cane toad distribution
- approximate toad front 2021
- approximate toad front 2022
- approximate toad front 2023
- approximate toad front 2024
- approximate toad front 2025
- predicted toad front movement 2026
- predicted toad front movement 2027

DBCA lands

- National Park
- Nature Reserve
- Conservation Park
- Section 5(1)(g) Reserve
- Section 5(1)(h) Reserve
- Marine Park
- Section 34A Freehold

N

1:3,000,000

0 25 50 100 150 200

Kilometres

GDA94 MGA Zone 50

Produced by the Department of Biodiversity, Conservation and Attractions

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